

Research Article

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Observations and faunistic notes on some Diptera of Bahçesaray district (Van Province, East Turkey)

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Abstract: Observations and faunistic notes on some Diptera of Bahçesaray district (Van Province, East Turkey).
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In this paper, the first attempt on Diptera fauna of Bahçesaray district (Van Pr., East Turkey) was made. From the district, 62 species of 17 families are listed with synonyms, and distributional codes. Totally 20 species are mentioned as new for the fauna of Van Province, and one species new for Turkey. Observations made during field studies of the authors are supported by several illustrations.

Key words: Diptera, fauna, Bahçesaray, Van, Turkey.



Fig. 1 – *Odontomyia flavissima*, during feeding on *Asteraceae*. Bahçesaray, Paşaköy 1600m 12 6 2016, M. Kemal (Cesa)

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In the latest publication, the authors listed the hemipteran and homopteran species collected from Bahçesaray district (Kemal & Koçak, 2017). The material were collected by the authors during their several entomological trips to the district Bahçesaray (Van Province, East Turkey), in order to determine primarily the Lepidoptera fauna. According to the faunistical results on the Lepidoptera, Hemiptera and Homoptera fauna of Bahçesaray, the number of species rose to 725 (Kemal & Koçak, 2017).

In the present paper, the observations on the Diptera of Bahçesaray are evaluated from the faunistical standpoint. In total, 62 species are reported here. In this way, the number of species represented in Bahçesaray Pterygota fauna increases to 789.

The Diptera fauna of Van Province (East Turkey) is currently little known. Observational notes were published by the author in various faunistical publications (Kemal & Koçak, 2010, 2013, 2014, 2015; Koçak & Kemal, 2009, 2012, 2013b-c). Nevertheless, the first comprehensive work on the Diptera of Turkey was published by the authors (Koçak & Kemal, 2013a). The preparation of the list and the identities of the species are greatly based upon this publication (Koçak & Kemal, 2013a). However, some important taxonomical changes were recently published on western Palaearctic *Conopidae* (Stuke, 2016).



Fig. 2 – *Asilidae* in copula. Bahçesaray, Upper Mukus Valley 1780m (65Am1), on 6 7 2016, M. Kemal (Cesa)

List of the Diptera species

In the following synonymous list, 62 species of 17 families recorded from Bahçesaray district, are given in alphabetical order. Among them, 20 species are reported here as new to the fauna of Van Province. Range of each species are mentioned as codes (Koçak & Kemal, 2017). Some species, where observed in their living places of Bahçesaray are illustrated. The symbol “#” denotes unavailable name.

Asilidae (Fig.2)

1. *Dasypogon diadema* (Fabricius, 1781)

Synonyms: *diadema* Fabricius, 1781; *punctatus* Fabricius, 1781; *bohemicus* Preyßler, 1790; *analisis* Fabricius, 1794; *cylindrica* Fabricius, 1794; *nervosus* Meigen, 1804; *liburnicus* Germar, 1817; *fasciatus* Meigen, 1820; *umbrosus* Brullé, 1832; *sicanus* Costa, 1853; *rubidus* Hermann, 1906 **Range (in codes):** IR AL MK AT AZ Cc BE B-H BG HV CZ FR DE GR HU IT MA PL RO RU SK SS ES CH TR GB 35 48 65 65A 65Am 65Am2

New to the fauna of Van Province.

Bibionidae

2. *Bibio hortulanus* (Linnaeus, 1758)

Synonyms: *hortulanus* Linnaeus, 1758; *citrius* Harris, 1776; *hirtipes* Loew, 1846; *hispanicus* Duda, 1930; *major* Duda, 1930 Range (in codes): TN PT ES FR GB BE NL DK DE SE EE PL CZ SK CH AT HU IT Sa Si GR TR IL Pa IR 03 09 13 15 20 31 32 42 44 50 56 65 73 76 13A 13Ab 13Ax 13G 31K 31Ka 42M 44L 44Lc 50G 56D 56F 65A 65Ag 65F 65Fd 65N 65Np2 65Ns 65Nm 73A 73Ak 76A 76Ac 76B 76Bf 76Bh 76Bi 76Bj 76Bk
This species is common in the district, early in the spring.

3. *Bibio marci* (Linnaeus, 1758)

Synonyms: *marci* Linnaeus, 1758; *brevicornis* Linnaeus, 1758; *crassipes* Harris, 1776; *funerosus* Harris, 1776; *pusillus* Macquart, 1846 Range (in codes): PT ES FR GB IE NO SE FI RU UA EE PL DK DE CZ SK HU CH AT IT Sa Si TR 13 44 56 65 13F 13G 13Ga 44L 44Lc 56D 56Db 65A 65Am1 65Am 65D 65Dr 65Drb 65F 65Fd 65Fp 65Fz
Like the preceding species.

Bombyliidae

4. *Bombylella atra* (Scopoli, 1763)

Synonyms: *ater* Scopoli, 1763; *#quartus* Schaeffer, 1768; *uralensis* Gmelin, 1790; *barbulus* Pallas, 1818; *lugubris* Loew, 1855 Range (in codes): AL AM Cc AT AZ GG BY BE B-H BG HV CZ EG EE FR GR HU IR Ab Oru IL Pa IT Si KG KW KK LB LT MK MT OM PL RO RU Sb SA SK SS ES CH SY TJ TR TM UA AE UZ YU 13 17 21 32 31 33 35 38 48 51 56 65 70 73 13F 13G 13Ge 21L 21Ld 31K 31Ka 56F 56Fi 65A 65Ai 65Am 65Am4 65At 65At3 65D 65Dh 65F 65Fb 65Fp 65Fz 65K 65Kl 65Kd 65N 65Np4 65Np7 65Np8 65Nr4 65Nm 73D 73Df
Common in the district, early in the spring.

5. *Bombylius (s.str.) discolor* Mikan, 1796

Synonym: *discolor* Mikan, 1796 Range (in codes): DZ AM Cc AT AZ GG BY BE HV CZ DK EE FI FR DE GR HU IT Si LT LY MD PL PT RO RU Sb SK ES CH TR GB UA YU 31 56 65 76 31K 31Ka 56D 65A 65An 65Am 65Am4 65B 65Bn 65Bn1 65D 65Dh 65N 65Np2 65Nc 65Np4 65Nr6 65Nm 76B 76Bf 76Bh
Locally common.

6. *Chalcochiton pallasii* (Loew, 1856)

Synonyms: *pallasii* Loew, 1856; *schineri* Nowicki, 1868 Range (in codes): IT MK GR BG UA Cc TR SY LB JO RU AZ AM GG IR KK MD MA PL RO SS SY TJ UZ TM 01 06 13 14 21 25 30 35 36 38 42 44 48 60 65 68 76 01B 13G 13Ge1 13Gs 13Gw 13F 13F20 21L 21Lf 36D 36Db 38H 38Hc 42O 44A 44Ab 65A 65Ai 65At 65At2 65B 65Bn 65Bn1 65D 65Db 65Dc 65Fz 76D 76Dd
Rare in the district.

7. *Exoprosopa dispar* (Loew, 1869)

Synonyms: *dispar* Loew, 1869; *interrupta* Paramonov, 1928 nec Wied., 1828; *paramonovi* Evenhuis, 1978 Range (in codes): IT Si FR GR Rd HU MA LB PT RU ES TN TR IR Ab Khy YU 07 13 17 25 30 32 33 38 42 43 44 46 48 65 13A 13Ae 13Ax 65A 65Ac 65D 65Df 65Fz 65K 65Ky1 65N 65Nb 65Nr4 65Nm
Locally common.

8. *Hemipenthes velutina* (Meigen, 1820)

Synonyms: *velutinus* Meigen, 1820; *bicincta* Wiedemann, 1820; *nycthemera* Wiedemann, 1820 Range (in codes): PL BG RU UA MD Cc AZ AM GG IL Pa LB DZ MA TN SY IT Si Sa TR IR Ab Oru CN Ui PK TM YU EG 04 06 07 13 14 18 22 24 25 30 32 33 36 37 38 42 46 48 51 57 58 65 70 73 76 78 04E 04Eb 06R 07A 07Aa 07I 13A 13Ab 13Ax 13G 13Gs 13Gw 36D 36Db 42J 42O 58G 65A 65Ai 65D 65Dc 65Df 65D1 65F 65Fd 65Fe 65Fp 65Fc 65Fz 65G 65Ge 65Gp 65K 65Kb 65Kc 65Kd 65N 65Ns 65Np 65Np1 65Np4 65Nr3 65Ns 65Nm 73A 73Ad 73Ad2 76B 76Bb 76Bi 76D 76Da 76Dh 76Dg
Locally common.

9. *Lomatia tysiophone* Loew, 1860

Synonyms: *tysiophone* Loew, 1860; *infernalis* Schiner, 1868 Range (in codes): TR AL DZ AM AZ Cc BG FR GR GG HU IL Pa IT Si LY MK MD RO RU ES SY TM UA YU 65 65A 65Au
Locally common. New to the fauna of Van Province.

10. *Phthiria vagans* Loew, 1846

Synonyms: *vagans* Loew, 1846; *pallascens* Engel, 1933 Range (in codes): AM AZ GG Cc BY HV EE FR GR HU IT Si IR IL Pa KK LT HU MK MD RO RU ES TJ TR TM UA UZ YU 07 33 38 42 46 48 65 70 65A 65An 65K 65Kz 65Kg 65N 65Np 65Nm
Uncommon.

11. *Heteralonia (Acrodisca) suffusa* (Klug, 1832)

Synonyms: *suffusa* Klug, 1832; *conturbata* Loew, 1869 Range (in codes): KE SO AF AM AZ Cc CY IT GR GG IR Ab Khy IL Pa MD KG RU SA SY LB TN UA YU TR 04 05 06 12 13 25 33 42 44 46 50 65 05A 13A 13Ac 13Ax 25A 25Ab 42B 65A 65Am 65Am2 65Am3 65D 65Db 65Df 65F 65Fb 65Fe 65Fp 65Fz 65F4 65G 65Gf 65K 65Kd 65Kz 65Ké 65Kğ 65N 65Nb 65Nr2 65Nr6 65Nm

Locally common.

12. *Villa hottentotta* (Linnaeus, 1758)

Synonyms: *hottentotta* Linnaeus, 1758; *nugator* Harris, 1780 Range (in codes): AF AL DZ Cc AM TR AZ GG IR Ab Khy Oru AT BY BE B-H BG CN HV CZ DK EE FI FR DE GR HU IE IT Sa Si 07 24 32 36 65 70 65A 65Ai 65F 65Fd 65N 65Ne

Locally common.

Conopidae**13. *Dalmannia dorsalis* (Fabricius, 1794) (Fig. 3)**

Synonyms: *dorsalis* Fabricius, 1794; *flavescens* Meigen, 1824; *dorsata* Meigen, 1824; *marginella* Zetterstedt, 1844; *vernalis* R-D., 1853; *confusa* Becker, 1922 Range (in codes): MA DZ TN ES FR DE CZ PL HV CH AT HU IT TR GR Cc RU Sb KG KK 65 65A 65Am 65Am4 65D 65Dh 65K 65Ku

14. *Myopa buccata* (Linnaeus, 1758)

Synonyms: *buccata* Linnaeus, 1758; *buccae* Harris, 1776; *florea* R-D., 1853 Range (in codes): ES FR IE GB BE NL DE DK CH IT Si HU RO SK CZ NO LT PL TR IR Ak JP MY 25 35 47 48 65 69 76 65A 65Am 65Am4 65Ac 65F 65Fp 65Fz 65N 65Ne 65Nc4 76B 76Bf 76Bh

15. *Myopa dorsalis* Fabricius, 1794 (Fig. 5)

Synonyms: *testacea* Gmelin, 1793 nec Linn., 1767; *dorsalis* Fabricius, 1794; *ferruginea* Panzer, [1794]; *grandis* Meigen, 1804; *nigrifacies* Becker, 1922 Range (in codes): MA DZ TN EG ES FR BE NL DE DK PL SK CZ CH IT AT HU RO AL BG TR IR Ak TM KG Cc Ch IN 08 25 42 65 65A 65Au 65B 65Bn 65Bn1 65D 65Dn

16. *Physocephala pusilla* (Meigen, 1804) (Fig. 4)

Synonyms: *pusilla* Meigen, 1804; *lacera* Meigen, 1824; *annulipes* Wiedemann, 1824; *pumila* Macquart, 1835; *tener* Loew, 1847; *persica* Becker, 1913; *punctithorax* Becker, 1913 Range (in codes): MA DZ TN EG PT ES CH CZ AT FR CZ DE IT Si HU B-H YU HV RO BG GR CY TR UA SY IR Ss Ke TM KG KK MN RU AF CN AM Cc 32 65 65A 65At 65B 65Bn 65Bn1 65D 65Do

“*Conops lacera*” described by Meigen in 1824 was widely used as a valid name of a distinct species. Recently, Stuke (2016, 2017) discussed its status as a colour form, and synonymized as an invalid name under “*Physocephala pusilla* (Meigen, 1804)”.

Ephydriidae**17. *Ochthera schembrii* Rondani, 1847**

Synonyms: *schembrii* Rondani, 1847; *mantispa* Loew, 1847; *setigera* Czerny, 1909 Range (in codes): ES GB FR IT Co Sa Si GR BG TR IR 07 20 65 65A 65At 65At1

New to the fauna of Van Province.

Limoniidae**18. *Eloeophila* sp.?n. aff. *tigr costa***

Range (in codes): TR 65 65A 65Ai

According to Oosterbroek, the *Eloeophila* images, that we submitted last year, seems to be a new species, with the wing pattern somewhat nearer to *tigr costa* from Spain (pers. comm., in 2016). Unfortunately, this year we couldnot collect the necessary material from the district. Therefore, its specific identity remains still uncertain.

19. *Limonia splendens* Kuntze, 1920

Synonyms: *splendens* Kuntze, 1920; *zebrina* Savchenko, 1979 Range (in codes): AT B-H BG GR HU IT MK SK GG Cc TR 65 65A 65Ai

New to the fauna of Turkey, and Van Province (Oosterbroek, pers. comm., in 2016).



Figs. 3, 4 – *Dalmannia dorsalis*, resting on *Boraginaceae*. Bahçesaray, Upper Mukus Valley 1840m (65Am4), on 10 6 2016 (left); *Physocephala pusilla*, Bahçesaray, Altındere (65At), on 26 6 2016 (right), M. Kemal (Cesa)



Fig. 5 – *Myopa dorsalis*, resting on *Boraginaceae*. Bahçesaray, Upper Mukus Valley 1840m (65Am4), on 10 6 2016, M. Kemal (Cesa)

Platystomidae

20. *Platystoma chrysotoxum* Hendel, 1913

Synonym: *chrysotoxum* Hendel, 1913 Range (in codes): TR IR Kd Yz 04 42 44 65 04E 04Eb 42K 42Kb 65A 65Au 65D 65Dç 65F 65Fd 65Fp 65Fq 65Fz 65G 65Gb 65Gm 65K 65Kb
Uncommon.

21. *Platystoma seminationis* (Fabricius, 1775)

Synonyms: *seminationis* Fabricius, 1775; *fulviventre* Schrank, 1781; *biseta* Loew, 1868; *vegetationis* Rondani, 1869
Range (in codes): ES GB BE NL DE DK CH AT IT HU CZ PL RU UA RO TR Cc 07 44 56 65 70 73 76 44L 44Le 56D 56Db 56F 56Fa 56Fc 65A 65Am1 65Am4 65Am 65As 65At 65F 65Fb 65Fd 65N 65Np 65Nş 65Nm 73A 73Ac 76D 76Dd
Uncommon.

Nemestrinidae**22. *Neorhynchocephalus tauscheri* (Fischer, 1812)**

Synonym: *tauscheri* Fischer, 1812 Range (in codes): ES FR TR RO RU Sr IR Elb Th GR Rd UA Cm Cc Da GG AM AZ TM UZ KK KG TJ 05 13 44 46 65 13G 13Ga 44L 44Lc 65A 65Ai 65As 65D 65Df 65F 65Fc 65Fd 65Fp 65Fz 65N 65Np 65Np8 65Nr4 65Nr6 65Nm

Locally common. Adults strongly heliophil and visit frequently *Boraginaceae* flowers.

Sarcophagidae**23. *Miltogrammidium (s.str.) taeniatum* (Meigen, 1824) (Fig.6)**

Synonyms: *taeniatum* Meigen, 1824; *pilimanum* Rondani, 1859 Range (in codes): DE PL ES HU FR Co IT Si YU AL BG RU UA Cc AM AZ TR TM TJ UZ KK KG IR MN IN LK 15 60 65 65A 65Au

Uncommon. New to the fauna of Van Province.

24. *Sphenometopa steinii* (Schiner, 1862)

Synonym: *steinii* Schiner, 1862 Range (in codes): TR HV AT 07 65 65A 65Am 65Am4

Uncommon. New to the fauna of Van Province.



Fig. 6 - *Miltogrammidium taeniatum* (det. Prof. Dr. Y. Verves), Bahçesaray Lower Mukus Valley 1570m (65Au), 6 6 2016, M. Kemal (Cesa)

Scathophagidae**25. *Scathophaga stercoraria* (Linnaeus, 1758)**

Synonyms: *stercoraria* Linnaeus, 1758; *exilis* Harris, 1780; *merdaria* Fabricius, 1794; *soror* Wiedemann, 1818; *parisiensis* R-D., 1830; *claripennis* R-D., 1830; *humilis* R-D., 1830; *merdivora* R-D., 1830; *lutipes* Wiedemann, 1830; *hottentota* Macquart, 1843; *helenae* Thomson, 1868 Range (in codes): MA Cn AF AD AT B-H CN HV CZ DK EG EE FR FI DE GB HU IT JP KP KR IE LT MN NO NL PL RO RU Sb Us ES SK SE CH TN TR Cc ZA CA US 13 34 56 65 70 75 13A 13Ab 13Ax 56D 56Db 56F 56Ff 56Fr 65A 65An 65Ac 65Ac3 65B 65Bn 65Bn1 65G 65Gf 65N 65Nc 75F

Sciomyzidae**26. *Dichetophora obliterated* (Fabricius, 1805)**

Synonyms: *obliterated* Fabricius, 1805; *ichneumonea* R-D., 1830; *gracilis* Loew, 1845 Range (in codes): GB FR DE AT CH CZ HU IT RO CY MA BE NL MA CY TR GR Rd 30 56 65 73 30D 30Dt 56F 56Fb 65A 65Am 65Am1 65F 65F2 73A

Uncommon.

Stratiomyidae

27. *Odontomyia flavissima* (Rossi, 1790) (Fig.1)

Synonyms: *flavissima* Rossi, 1790; *decora* Meigen, 1822; *infusata* Meigen, 1830; *semiviolacea* Brullé, 1832; *nigripes* Macquart, 1847; *laufferi* Strobl, 1909 Range (in codes): MA DZ TN ES IT AT CZ GR SY TR IL Cc GG AZ 01 33 38 48 65 33P 33Pb 48F 65A 65Ai

Rare in the district. It was observed during feeding on *Achillea* or *Tanacetum* flowers at Paşaköy only. New to the fauna of Van Province.

28. *Stratiomys ruficornis* (Macquart, 1838) (Fig.7)

Synonyms: *ruficornis* Macquart, 1838; *erythrocerus* Egger, 1859; *pyrrhocera* Loew, 1868 Range (in codes): FR PL AT CZ HU RO BG YU AL GR RU TR IQ Bgd LB SY IR Cc AM AZ 06 08 15 16 26 33 38 44 58 65 65A 65Ac 65Ac2 65Ai 65D 65Dç 65Dd 65Dda 65F 65Fp 65Fz 65Fm 65N 65Np7 65Nr4 65Nm

Rare in the district.

29. *Stratiomys singularior* (Harris, [1776])

Synonyms: *singularior* Harris, [1776]; *furcata* Fabricius, 1794; *pantheleon* Fallén, 1817; *riparia* Meigen, 1822; *paludosa* Siebke, 1863 Range (in codes): GB DE SE NO RU Sb Us KG IR MN CN TR 65 65A 65Ao

Rare in the district.



Figs. 7, 8 - *Stratiomys ruficornis*, Bahçesaray Paşaköy 1600m (65Ai), on 12 6 2016 (left); *Theriopectes tricolor*, Bahçesaray Altindere 1970m (65At1), 4 7 2016 (right), M. Kemal (Cesa)

Syrphidae

30. *Chrysotoxum cautum* (Harris, [1776])

Synonym: *cautum* Harris, [1776] Range (in codes): SK RU GG Cc AM TR KG 07 14 16 25 33 37 38 48 50 60 63 65 67 68 70 78 65A 65Am 65Am4

New to the fauna of Van Province.

31. *Eristalinus (Eristalodes) taeniops* (Wiedemann, 1818)

Synonyms: *taeniops* Wiedemann, 1818; *pulchripes* Wiedemann, 1822; *fasciatus* Germar, 1845; *aegyptius* Walker, 1849; *torridus* Walker, 1849; *completus* Santos-Abreu, 1924; *concinus* Santos-Abreu, 1924 Range (in codes): MA EG Cn PT ES FR Co IT Sa Si YU AL RO CY TR IR Ab Khy GR Cr Rd LB IL Pa SY EG LY TN MA Cc ZA NP PK IN US Cf Fl AE AF ZA 01 06 07 25 31 32 33 35 38 46 48 56 65 07C 46B 56F 56Fc 65A 65Am 65Am4 65D 65Dp 65F 65Fe 65K 65N 65Nc 65Ku

Common in the district.

32. *Eristalinus (Lathyrphthalmus) aeneus* (Scopoli, 1763)

Synonyms: *aeneus* Scopoli, 1763; *punctatus* Müller, 1764; *macrophthalmus* Preysler, 1791; *taphicus* Wiedemann, 1830; *cuprovittatus* Wiedemann, 1830; *stygius* Newman, 1835; *sincerus* Harris, 1841; *aenescens* Macquart, 1842; *auricalcica* Rondani, 1865; *nigrolineatus* Hervé-Bazin, 1923 Range (in codes): MA DZ TN EG Cn KE TZ MU AU Hw US Tx On Cf CA PT ES FR IE GB BE NL DK DE SE NO FI EE LT LV BY RU UA PL CZ SK HU CH AT IT Sa Co Si SS HV B-H YU BG RO MD MK GR Cr CY TR IR Ab Khy CN MN AE SY AF Hw AU 01 06 07 12 14 18 26 31 32 33 35 37 38 39 42 44 46 48 60 65 67 68 78 12A 12Ai 44L 44Lc 46B 65A 65Am 65Am1 65N 65Nc 65Np 65Nm

Common in the district.

33. *Eristalis (Eoseritalis) arbustorum* (Linnaeus, 1758)

Synonyms: *arbustorum* Linnaeus, 1758; *nemorum* Linnaeus, 1758; *horticola* De Geer, 1776; *lineole* Harris, 1776; *lyra* Harris, 1776; *deflagrata* Preysler, 1793; *fumigata* Becker, 1921; *bulgarica* Szilady, 1934; *polonica* Szilady, 1934; *strandi* Duda, 1940 Range (in codes): MA DZ Az IE PT ES FR BE DK SE FI PL EE LT LV BY RU UA GB HU NL DE NO CZ SK CH AT IT Co Si Sa SS HV B-H YU MK BG GR Cr TR IR Ab Khy AF IN US CA 01 03 06 07 12 13 14 15 17 18 22 25 26 31 32 33 37 38 39 42 44 46 48 56 57 60 65 67 68 73 74 76 78 12A 12Ab 13A 13Ab 13Ac 13Af 13Ax 13F 13G 13Gö 13Gğ 25E 37K 44L 44Lc 46B 48F 56F 56Fa 65A 65An 65Am 65Am1 65F 65Fd 65F1 65Fp 65Fz 65N 65Nc 65Np1 65Np4 65Nm 73A 73Ak 76D 76Dğ

Common in the district.

34. *Eristalis (s.str.) nemorum* (Linnaeus, 1758)

Synonyms: *nemorum* Linnaeus, 1758; *interruptus* Poda, 1761; *lineolae* Harris, 1776 Range (in codes): AT BY BE B-H BG HV CZ EE FI FR GR HU IE IT LT LV MK NO PL RO Sa Si SK ES SE CH NL UA YU RU TR 37 65 65A 65Ai

New to the fauna of Van Province.

35. *Eristalis (s.str.) tenax* (Linnaeus, 1758)

Synonyms: *tenax* Linnaeus, 1758; *vulgaris* Scopoli, 1763; *fuscus* Scopoli, 1763; *porcinus* De Geer, 1776; *arbustorum* Schrank, 1781; *silvaticus* Meigen, 1822; *vulpinus* Meigen, 1822; *sinensis* Wiedemann, 1824; *columbica* Macquart, 1855; *ventralis* Thomson, 1869... Range (in codes): Cn Az Hw US Cf PT ES FR RU HU DE NL NO GR Cr TR IR Ab Khy JP Us Md CN AU NZ 01 03 06 07 12 13 14 17 18 25 26 31 32 33 34 35 37 38 39 42 44 46 48 56 60 61 64 65 68 73 12A 12Ab 13A 13Ab 13Ac 13Ac 13Af 13Ax 13B 13Bg 13Gw 34R 34Rb 37K 38C 38Ca 44L 44Lc 46B 48F 56F 56F1 65A 65Am 65Am4 65As 65F 65F4 65Fd 65K 65Kz 65Kg 65N 65Nc 65Nr4 65Nr6 65Nm 65Ns 73A 73Ak

Very common in the district.

36. *Eupeodes corollae* (Fabricius, 1794)

Synonyms: *consisto* Harris, 1776; *corollae* Fabricius, 1794; *pyrorum* Schrank, 1803; *olitoria* Fallén, 1817; *lacerus* Meigen, 1822; *fulvifrons* Macquart, 1827; *crenatus* Macquart, 1927; *annularis* Curtis, 1837; *octomaculata* Curtis, 1837; *propinquus* Macquart, 1850... Range (in codes): MA TN EG Cn Md DZ GB HU NL DE SE NO TR RU Ur Sb KG Cc IR Ab Khy MN CN IN SI Djl AU TW TA 01 03 06 07 14 15 18 22 25 26 31 32 33 35 37 38 42 46 48 50 57 60 65 67 68 70 74 78 80 65A 65Ai 65N 65Nc 65Np 65Nm

Common in the district.

37. *Eupeodes latifasciatus* (Macquart, 1829)

Synonyms: *latifasciatus* Macquart, 1829; *affinis* Loew, 1840; *abbreviatus* Zetterstedt, 1849; *flavipes* Rondani, 1857; *submaculatus* Frey, 1918 Range (in codes): FR RU IT FI Ur Sb Cc KG SY TR AF MN US IN Hp Sml 01 06 14 31 33 35 37 46 48 65 65A 65Ai

New to the fauna of Van Province.

38. *Eupeodes luniger* (Meigen, 1822)

Synonyms: *luniger* Meigen, 1822; *nigrifemoratus* Macquart, 1829; *bucculatus* Rondani, 1857; *maricolor* Enderlein, 1938; *azureus* Szilady, 1940; *transcendens* Szilady, 1940 Range (in codes): HU AT IT HV FR Cn TN MA JP MN AF RU SE ES RU Sb Ur Krl JP IR Ab Khy TR IN Hp Sml 01 06 14 18 35 37 48 65 78 37K 65A 65Am 65Am1

New to the fauna of Van Province.

39. *Melanostoma mellinum* (Linnaeus, 1758)

Synonyms: *mellinum* Linnaeus, 1758; *facultas* Harris, 1776; *scalare* Panzer, 1797; *mellarium* Meigen, 1822; *melliturgus* Meigen, 1822; *laevigatum* Meigen, 1822; *minutum* Macquart, 1827; *unicolor* Macquart, 1827; *concolor* Walker, 1851; *pruinatum* Bigot, 1884; *nigricornis* Stroble, 1893 Range (in codes): Cn MA DZ US PT ES FR GB IE IS NO SE FI LT LV EE BY RU Ur Sb UA PL DK DE BE NL CH AT IT Co Sa Si HV B-H YU CZ SK HU MD RO GR MK AL CY SY Cr TR IR Ab Khy AF JP MN 01 06 07 09 14 17 18 22 25 26 31 32 33 35 37 38 39 42 46 48 57 60 65 67 68 78 35C 37K 48F 65A 65Ai

Note: The identity of this species is not exact. The female with oval abdomen and yellow, somewhat triangular maculations on tergites 2-4.

Apparently, new to the fauna of Van Province.

40. *Merodon avidus* (Rossi, 1790)

Synonyms: *avidus* Rossi, 1790; *spinipes* Fabricius, 1794; *rufitibius* Rondani, 1845; *graecus* Walker, 1852; *aurifer* Loew, 1862; *quadrilineatus* Lioy, 1864 Range (in codes): DZ MA LY PT ES SE RU NL BE DE PL RO CZ CH IT Sa HU AT CY LB TR GR AL YU IR 01 02 06 07 16 25 26 31 37 38 42 44 46 48 51 65 67 68 73 78 37K 38C 38Ca 46B 65A 65As

New to the fauna of Van Province.

41. *Merodon velox* Loew, 1869

Synonyms: *velox* Loew, 1869; *anathema* Paramonov, 1925; *armeniaca* Paramonov, 1925 Range (in codes): MK GR Rd TR Cc AM Eri AZ Nv Ord 02 06 07 13 14 15 16 21 25 35 36 37 38 46 48 56 65 67 73 76 13A 13Ab 13Ax 13F 13G 13Gö

13Gğ 21N 37K 46B 56F 56F1 65A 65Ai 65An 65B 65Bn 65Bn1 65D 65Dç 65Dx 65Fe 65Fz 65G 65Gx 65Gz 73A 73Ak 76B 76Bf 76Bh 76D

Common in the district.

42. *Paragus (s.str.) bicolor* (Fabricius, 1794)

Synonyms: *cruentata* Geoffroy, 1785; *bicolor* Fabricius, 1794; *melonchrysa* Gmelin, 1788; *zonatus* Meigen, 1822; *arcuatus* Meigen, 1822; *ater* Meigen, 1822; *taeniatus* Meigen, 1822; *testaceus* Meigen, 1822; *punctulatus* Zetterstedt, 1838; *ruficauda* Zetterstedt, 1843... Range (in codes): TR DZ FR GB HU GR Cr CN Ui Um IR Ab Khy AF 06 07 14 18 25 32 37 38 42 46 48 50 51 60 65 67 68 78 37K 38C 38Ca 65A 65Am 65Am4

New to the fauna of Van Province.

43. *Sphaerophoria scripta* (Linnaeus, 1758)

Synonyms: *scripta* Linnaeus, 1758; *gemmata* Scopoli, 1763; *fasciata* Müller, 1764; *invisita* Harris, 1776; *menthostri* De Geer, 1776 Range (in codes): Cn TR DZ US GB HU NL DE YU GR Cr RU Ur Sb Cc KG SY AF CN Ui Nra MN Az Md IR Ab Khy NP 01 03 04 06 07 08 13 14 15 18 20 22 25 26 31 32 33 35 36 37 38 42 46 48 56 60 61 65 68 76 78 80 04C 04Cc 13F 14B 14Bb 36D 36Db 37K 48F 56B 56D 56Dc 65A 65Am 65Am1 65Am4 65D 65F 65Fb 65N 65Nc 65Np 65Np1 65Nm 76B 76Bf 76Bh

Common in the district.

44. *Spilomyia triangulata* Steenis, 2000

Synonyms: *triangulata* Steenis, 2000; *#trivittata* Koçak & Kemal, 2013 Range (in codes): FR MK GR HV TR Cc AM IR Qz 25 56 65 73 25F 25O 56F 56Fp 65A 65Ac 65Ac3 73A

New to the fauna of Van Province.

45. *Syrirta pipiens* (Linnaeus, 1758)

Synonyms: *pipiens* Linnaeus, 1758; *proxima* Say, 1824; *obscuripes* Strobl, 1899; *albicincta* Santos Abreu, 1924; *flavicans* Szilady, 1940; *vicina* Szilady, 1940; *tenofemora* Dzhabarova, 1974 Range (in codes): MA DZ Cn Md TR SY IR AF MN CN Cc US PT ES FR IE GB NO SE FI EE LY LV BY RU BE NL DK DE PL CZ SK HU UA MD RO CH AT IT Co Sa Si MT SS HV B-H YU MK GR BG Cr Rd CY IR Ab Khy CN Ui Atp 01 03 06 07 09 13 14 17 18 20 25 26 31 32 33 35 37 38 39 40 42 44 46 48 57 58 60 65 67 68 74 78 80 13F 31K 31Ka 37K 40G 40Gb 44L 44Lc 46B 48F 58G 58Gg 65A 65Am 65Am4 65F 65Fé 65Fd 65K 65Ku 65N 65Np 65Np5 65Nm

Common in the district.

46. *Volucella zonaria* (Poda, 1761)

Synonyms: *zonaria* Poda, 1761; *bifasciata* Scopoli, 1763; *valentina* Müller, 1766; *inanis* Fabricius, 1794 nec Linn.; *fasciata* Herrich-Schäffer, 1829; *beckeri* Van der Goot, 1961 Range (in codes): TN PT ES GB NL BE DE FR Co CZ SK CH AT HU RO GR Cr TR PL YU RU Sb MN IR Ab Khy TM UZ KK TJ KG 01 06 07 14 18 25 26 32 33 37 38 42 46 48 56 57 58 64 65 67 68 80 37K 38C 38Ca 46B 56F 56Fa 56F1 58G 58Gi 58R 58Rb 65A 65Ai 65Am 65Am4 65E 65F 65F2 65Fq 65K 65Ku 65N 65Nc 65Np 65Nm

Common in the district.

Tabanidae

47. *Theriopectes tricolor* Zeller, 1842 (Fig.8)

Synonyms: *tricolor* Zeller, 1842; *ruficauda* Enderlein, 1925; *kirchbergi* Moucha & Chvala, 1959 Range (in codes): IT GR Si TR Cc UA Cm BG RU RO 04 05 06 10 11 14 16 25 26 29 33 35 36 37 38 42 43 44 50 51 58 59 60 65 75 80 06B 06H 14B 14Bb 25A 36F 36Fa 38C 38Ca 38H 44E 51D 51De 65A 65Ai 65Ae 65Am 65Am4 65At 65At1 65N 65Nr2 65Nr4 65Nm

Uncommon in the district.

Tachinidae

48. *Cylindromyia (s.str.) brassicaria* (Fabricius, 1775)

Synonyms: *brassicaria* Fabricius, 1775; *boscii* R.-D., 1830; *trinacrina* Bigot, 1878; *sapporensis* Matsumura, 1916 Range (in codes): IE NO SE FI DK DE PT ES FR BE NL PL RU Sb Us UA CZ SK CH AT IT SS HV YU AL MK BG GR Co Sa Si Cr GB TR Md Cn MN CN Ui Ku Pkn Gn Mc Ti Yu JP Hkk 25 65 25F 65A 65Am 65Am3 65F 65Fw 65Fz

49. *Ectophasia crassipennis* (Fabricius, 1794)

Synonym: *crassipennis* Fabricius, 1794 Range (in codes): TR PT ES FR BE NL DE PL UA RU MD RO CZ SK HU CH AT IT SS B-H HV YU GR BG Si Co 13 65 13F 65A 65Ai

New to the fauna of Van Province.

50. *Ectophasia oblonga* (R-D.,1830)

Synonyms: *oblonga* R-D.,1830; *arvensis* R-D.,1830; *vagans* Meigen,1830; *dissimilis* Rondani,1842; *pulverulenta* Bigot,1860; *tessellata* R-D.,1863; *rubra* Girschner,1888 Range (in codes): FR BG ES PT IL Pa Cc RU PL TR 02 06 21 26 37 46 47 56 59 60 63 65 72 78 02A 02B 21K 21P 47C 47G 56C 63B 63G 65A 65Ai 72A
New to the fauna of Van Province.

51. *Eriothrix rufomaculatus* (De Geer,1776)

Synonyms: *lateralis* Fabricius,1775; *rufomaculatus* De Geer,1776; *demano* Harris,1780; *tachinaria* Fallén,1815 Range (in codes): PT ES FR BE NL DK DE NO SE FI EE UA PL IE GB CZ SK HU CH AT IT SS HV B-H YU MK GR BG RO MD RU TR IL Pa 25 37 60 65 67 74 76 65A 65Am 65Am4 65N 65Np 65Nm 76B 76Bf 76Bh

52. *Gymnosoma clavatum* (Rohdendorf,1947)

Synonyms: *clavata* Rohdendorf,1947; *verbekei* Mesnil,1952 Range (in codes): RU Cc CY IL Pa TR ES FR BE NL DK DE NO SE FI EE BY UA CZ SK HU CH AT Co Sa Si SS HV AL MK GR BG Cr 25 35 60 65 75 76 78 25F 25K 65A 65Ai 75F 76B 76Bf 76Bh
New to the fauna of Van Province.

53. *Macquartia tessellum* (Meigen,1824)

Synonyms: *tessellum* Meigen,1824; *brevicornis* Macquart,1839; *occlusa* Rondani,1859; *brunusquamis* R-D.,1863; *microcera* R-D.,1863; *olivaceomaculata* Porthinsky,1881; *genistae* Pandelle,1895 Range (in codes): PT ES FR GB NL DE PL SK CH AT IT Co Si B-H BG GR Cr CY Cn IL Pa Cc TJ TR 25 38 60 65? 38C 38Ca 65A? 65Am? 65Am4?

54. *Mintho rufiventris* (Fallén,1817)

Synonyms: *rufiventris* Fallén,1817; *lacera* Rondani,1847 Range (in codes): NL GB SE FI RU Sb Us MN IL Pa Cc TR IR Fa 25 38 65 38C 38Ca 65A 65Am 65Am2 65Am4 65F 65Fp 65Fz

55. *Tachina (Eudoromyia) fera* (Linnaeus,1761)

Synonyms: *fera* Linnaeus,1761; *reccumbo* Harris,1776; *virgo* Meigen,1824; *intermedia* R-D.,1830; *ruficornis* Meigen,1838; *fulviceps* Meigen,1838; *tetramera* Zetterstedt,1849; *algira* Macquart,1849; *autumnalis* Giglio-Tos,1890; *cenisia* Giglio-Tos,1891; *ligustica* Giglio-Tos,1891; *macquarti* Giglio-Tos,1891; *meigeni* Giglio-Tos,1891; *pamirica* Zimin,1967; *imitatrix* Zimin,1967 Range (in codes): PT ES FR GB IE NO SE FI BE NL DK DE EE RU UA PL RO CZ SK HU CH AT IT Co Sa Si HV SS B-H YU BG GR Cr CY TR Cc IL Pa MN JP DZ TJ Pm 12 13 25 37 60 65 73 75 76 13A 13Ac 13Ax 13G 13Gü 13Gw 65A 65Am 65Am1 65Am2 65Am4 65At 65D 65Dç 65Dè 65Dh 65F 65Fp 65Fz 65N 65Nr4 65Nm 73A 73Ak 75F 76B 76Bd

56. *Zophomyia temula* (Scopoli,1763)

Synonym: *temula* Scopoli,1763 Range (in codes): GB ES FR NO SE FI RU DK DE BE CH AT IT SS HV B-H YU CZ SK RO EE UA MD BG TR GR Si Cc 13 60 65 75 76 13G 13Gö 13Gg 65A 65Ap 65D 65Dç 65Fz 75F 76Bç 76Bf 76Bh

Tephritidae**57. *Tephritis postica* (Loew,1844) (Fig.9)**

Synonym: *postica* Loew,1844 Range (in codes): DZ ES FR Py IT DE CH AT TR GG Cc IR Ab Oru Ar KuS Es Ha Km Kh Se Th Dam Zj Kd Yz IL Pa KG KK CN Ui DZ 01 05 07 09 13 15 20 23 32 35 37 38 43 45 46 50 56 58 65 73 13F 56D 56Db 58G 65A 65Am 65Am1 65Am2 65Am4 65F 65Fd 65F1 65Fz 65G 65Gv 65Gz 65K 65N 65Nc 65Nc4 65Kz 65Kg 73A 73Aj 73Aj1 73H 73Ha
Common in the district, especially on *Asteraceae* flowers.

58. *Trupanea stellata* (Fuesslin,1775)

Synonyms: *stellata* Fuesslin,1775; *radiata* Schrank,1795; *terminata* Fallén,1814; *calcitrapae* R-D.,1830 Range (in codes): IE ES FR NO SE FI DK CZ SK EE HU MD RO AL GR BG Cr Rd CY Sa Si Co CH AT IT TR GB KG RU CN SA IN DZ IR Ar Ke Ss Th Km Ak Ab Aja Kd Yz IQ At UA Cc EG AF MN 01 06 07 08 10 13 15 20 22 24 25 26 27 30 32 35 36 38 42 44 46 48 58 65 69 73 76 13G 13Gö 13Gg 30A 30Ae 65A 65Ai 65F 65Fd 65N 65Nc 65Np 65Np2 65Nm 73D 73Df
Uncommon.

59. *Urophora jaceana* (M.Hering,1935)

Synonyms: *jaceana* M.Hering,1935; *#jacaena* Bayrak & Hayat,2012 Range (in codes): TR GB FR NO RU FI FR Py ES Cc Ur US 01 07 15 16 17 20 21 22 25 26 27 31 32 33 35 43 44 45 46 47 38 58 65 80 58G 65A 65Am 65Am1
New to the fauna of Van Province.

60. *Xyphosia miliaria* (Schrank,1781) (Fig.10)

Synonyms: *miliaria* Schrank,1781; *arcuata* Fabricius,1782 nec Linn.,1758; *sphaerocephali* Schrank,1803; *cirsiorum* R-D.,1830; *meridionalis* O.Costa,1854; *punctipennis* Hendel,1927 [ssp.]; *orientalis* M.Hering,1936 [ssp.];

balcanica Drensky, 1943 Range (in codes): ES FR GB IE NO SE FI EE UA PL DK DE CZ SK HU MD RO BG AL GR CH AT IT Sa Si TR KK KG Tk CN Mc RU Us Sb Cc IR Elb Th o3 o6 o7 o8 16 22 24 25 32 38 46 58 65 68 65A 65Au 65F 65F2 Uncommon.



Figs. 9, 10 – *Tephritis postica* on *Echinops* (Asteraceae), Bahçesaray Upper Mukus Valley 1780m (65Am1), on 6 7 2016 (left); *Xyphosia miliaria*, captured by a spider, Bahçesaray Lower Mukus Valley 1570m (65Au), 24 6 2016 (right), M. Kemal (Cesa)

Tipulidae

61. *Nephrotoma croceiventris* (Strobl, 1909)

Synonym: *croceiventris* Strobl, 1909 Range (in codes): ES FR AL AT BY BE B-H BG HV CZ FR DE GR Kos HU LT MK ME NL PL RO YU SK SS SE CH UA RU Cc GG AM AZ IT TR o4 o6 10 11 13 14 16 17 22 30 36 38 39 42 46 48 49 51 53 58 59 65 65A 65Ai
Common. New to the fauna of Van Province.

62. *Nephrotoma nox* (Riedel, 1910)

Synonyms: *nox* Riedel, 1910; *rossica* Riedel, 1920; *kozhevnikovi* Dodonov, 1925 Range (in codes): TR GG AM Eri AZ Nv Ord Len Cc IR Lo Kd Snj Sqg Elb Th Krr 13 25 30 36 65 13A 13Ab 13Ax 13D 13G 25F 25R 30D 36D 65A 65Ai 65F 65Fb 65N 65Nr4 65Nm
Common.

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